

Windows NT Workstation Start Up

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Topics

- Logon Security
- New Icons
- User Manager
- User Profiles
- Task Manager
- FAT vs. NTFS

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Not Covered

- NT Server Features--take 361
- Registry--take 368
- Network Issues--take 369
- Troubleshooting--take 845/W or 365/S
- Resource Kit--take 364

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Introducing NT

- 32-bit OS--runs in protected mode
- Uses preemptive multitasking
- Secure--unlike 95, users must log in

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First Glance

- Press Ctrl+Alt+Del to log in.

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Local vs. Domain

- Local login allows a user to use the local resources on the local workstation only.
- Joining a domain allows access to shared resources.

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Passwords

Characteristics:

- Minimum/maximum length
- Minimum/maximum age
- *Uniqueness* (how often it can be reused)
- Whether a user can change his
- How often the user must change it

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Start Menu

- Common groups (on top)
 - apps in the common groups are available to all users on the PC
- Personal/private groups (on bottom)
 - apps in personal groups are only visible to-- and accessible by-- specific users

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New Control Panel Icons

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Console Icon

- Enables you to configure the default appearance of command-prompt windows including font size, window placement, background color, and text color.
- You can configure the properties of specific icons via right-click.

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Devices Icon

If permitted, allows you to view, configure, and manually start or stop any of the device drivers installed on your system.

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Server Icon

- Shows various server statistics:
 - number of opened files
 - file locks
 - connected users
- Use to configure server-related settings:
 - directory replication
 - system alerts

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Services Icon

Lets you stop, pause, restart, or configure some of the installed system services, e.g., Computer Browser Service.

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Administrative Tools

- Backup (to tape)
- Disk Administrator (create partitions, format drives, and create stripe sets)
- Event Viewer (troubleshoot problems)
- Performance Monitor (fine tuning)
- Remote Access Admin (configure connections)
- **User Manager** (create/manage users)
- Windows NT Diagnostics (view HW/SW settings)

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User Manager

- Enables the system administrator to:
 - create users
 - create user groups
- Define user variables such as:
 - local group the user belongs in
 - a user's home directory
 - automatic expiration date on the account

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User Accounts

- You can create an unlimited number of users.
- After creating users, group them as appropriate.

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Default Users

- Administrator
- Guest (disabled by default)

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Creating a User

- Select New User from the User pull-down menu.
- Enter user information:
 - Username
 - Full Name
 - Description
 - Password
 - Confirm Password

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New User Options

check boxes

- ☒ User Must Change Password at Next Logon
- ☒ User Cannot Change Password
- ☒ Password Never Expires
- ☒ Account Disabled

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New User Options

buttons

- Ⓒ Groups
 - used to manage memberships
- Ⓒ Profile
 - options:
 - path to profile file containing desktop settings
 - batch file to run at logon
 - location of Home Directory
- Ⓒ Dialin
 - authorizes network access via Dial-Up Networking (not visible if Control Panel icon is not installed)

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Default Groups

- Administrators
- Backup Operators
- Guests
- Power Users
- Replicator (only used to receive files from NTS)
- Users

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Basic User Rights

- Access this computer from the network
- Back up files and directories
- Change the system time
- Force shutdown from a remote system
- Load and unload device drivers
- Log on locally
- Manage auditing and security log
- Restore files and directories
- Shut down the system
- Take ownership of files or other objects

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What rights does a user have?

- Whatever rights have been assigned directly to the user, and
- Whatever rights are assigned to the groups the user belongs to.

Note extraordinary capabilities that some groups have, e.g., Adm can create users; Adm and Power Users can create shares.

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Default Groups & Their Rights

- Access this computer from the network -- A, P
- Back up files and directories -- A, B
- Change the system time -- A, P
- Force shutdown from a remote system -- A, P
- Load and unload device drivers -- A
- Log on locally -- A, P, B, E, G, U
- Manage auditing and security log -- A
- Restore files and directories -- A, B
- Shut down the system -- A, B, E, P, U
- Take ownership of files or other objects -- A

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Administrators

- Can do just about anything to the computer
- Unique rights include:
 - create users and groups
 - load/unload device drivers
 - manage security audit functions
 - take ownership of files and objects

Rename for security purposes?

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Backup Operators

Rights:

- run backups
- log in
- restore files and directories
- shut down the system

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Guests

Rights:

- log in locally

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Power Users

Rights:

- create printer and file shares
- change the system time
- force shutdown from another system
- change priorities of processes
- log in locally
- shut down the system

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Users

Rights:

- log in locally
- run programs and access data
- shut down the system

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Managing Groups

- Double-click on the group name.
- A list of users in that group appears.
- Simply add or delete users to/from the group.

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User Profiles

- Allow multiple users sharing a single computer to customize their desktops and have those custom settings loaded at logon.
- If the administrator stores a user's profile on the server, a user can roam from computer to computer using the same profile.
- A local profile is create by default when a user account is created.

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User-Level Security

- Requires an NTFS partition.
- Use Explorer to set up permissions on a per-user or per-group basis for either folders or files.

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Share-Level Security

- Dependent by its nature on a networked environment.
- Set on a directory-by-directory basis.
- Each user sets up the security and password for others to share.
- Must belong to Administrator or Power User group to set up.

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Peer Resource Sharing

- Share directories and resources (such as printers) with other computers.
- Reduces traffic and server disk space demand.
- Limit of 10 inbound simultaneous connections.

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Task Manager

- To invoke:
 - Ctrl+Alt+Del, then select Task Manager
or
 - right-click on the taskbar, then select Task Manager

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Applications Tab

- Lists all loaded applications and their status (either *Running* or *Not Responding*).
- Button functions:
 - End Task
 - Switch To
 - New Task
- You can sort by task or status.

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Processes Tab

- Monitors all processes that are current running including:
 - your applications
 - background executables run automatically
 - services
- Terminate processes with the *End Process* button -- caution!
- Sort to show significance (e.g., CPU time and mem usage)

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Performance Tab

Monitors:

- CPU usage history
- Memory usage history

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Minimize Task Manager

- Appears as a small green bar (CPU usage indicator) next to the clock on the taskbar.
- Indicator increases and decreases as activity does.

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FAT vs. NTFS

- | | |
|---|---|
| <ul style="list-style-type: none">• FAT advantages:<ul style="list-style-type: none">– allows dual boot– backward compatibility– slightly faster• FAT disadvantages:<ul style="list-style-type: none">– 2.1 GB limit per HD– no security features | <ul style="list-style-type: none">• NTFS advantages:<ul style="list-style-type: none">– security features<ul style="list-style-type: none">• file password protection• limit access to files– file compression– file recovery– large partitions• NTFS disadvantages:<ul style="list-style-type: none">– slower |
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